

Claims:

1. A microscope with apparatus for rapidly changing dichroic beamsplitters in epi\_fluorescent microscopes, the microscope comprising:
  - a source of excitation light;
  - a high speed wheel having a center axis bisecting a predetermined reflection angle within an epi-fluorescent lightpath of the microscope optics and rotatable about the center axis driven by a changer;
  - a plurality of dichroic beamsplitter mirrors mounted to the wheel;
  - the wheel mounted in an epi-fluorescent microscope; and
  - a computer control, the changer responsive to the computer control, wherein computer software can command the changer to rotate different ones of the plurality of dichroic beamsplitters into the epi\_fluorescent lightpath to position a selected one of the dichroic beamsplitter mirrors in the lightpath to image a particular fluorophore, thereby providing a microscope system in which the device is commanded by the software to change dichroic beamsplitters.